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EXAMINER

BOYD, JENNIFER A

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/743,859	Applicant(s) OMMERBORN, DAGMAR	
	Examiner Jennifer A. Boyd	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/21/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 15 is objected to because of the following informalities: the claim language is awkward. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 5 – 6, 10 - 12 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949).

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In the present instance, claim 5 recites the broad recitation “breaking strength of at least 15 N/cm”, and the claim also recites “preferably 15 – 70 N/cm”, which is the narrower statement of the range/limitation. For the purposes of examination at this time, the Examiner will only give weight to the broader limitation, i.e. “at least 15 N/cm”.

In the present instance, claim 6 recites the broad recitation “not more than 60%”, and the claim also recites “preferably in the range of 10 – 25%”, which is the narrower statement of the range/limitation. For the purposes of examination at this time, the Examiner will only give weight to the broader limitation, i.e. “not more than 60%”.

In the present instance, claim 10 recites the broad recitation “at least 80 per dm”, and the claim also recites “preferably 195 – 250 dm”, which is the narrower statement of the range/limitation. For the purposes of examination at this time, the Examiner will only give weight to the broader limitation, i.e. “at least 80 per dm”.

In the present instance, claim 11 recites the broad recitation “at least 80 per dm”, and the claim also recites “preferably 110 - 150 dm”, which is the narrower statement of the range/limitation. For the purposes of examination at this time, the Examiner will only give weight to the broader limitation, i.e. “at least 80 per dm”.

In the present instance, claim 12 recites the broad recitation “polyester fiber”, and the claim also recites “preferably composed of PET”, which is the narrower statement of the range/limitation. Additionally, claim 12 recites the broad recitation “other synthetic fibers”, and the claim also recites “as of polyamide or polyacrylonitrile”, which is the narrower statement of the range/limitation. Additionally, claim 12 recites the broad recitation “a blend of fiber yarn of synthetic fibers”, and the claim also recites “preferably PET/PA”, which is the narrower

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statement of the range/limitation. For the purposes of examination at this time, the Examiner will only give weight to the broader limitations, i.e. “polyester fiber, other synthetic fibers or a blend of fiber yarn of synthetic fibers”.

In the present instance, claim 16 recites the broad recitation “20 dtex to 70 dtex”, and the claim also recites “especially in the range of 25 – 55 dtex” and “more preferably in the range from 30 – 45 dtex”, which is the narrower statement of the range/limitation. For the purposes of examination at this time, the Examiner will only give weight to the broad limitations, i.e. “20 dtex to 70 dtex”.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 – 3, 5 – 14 and 16 – 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Warthen et al. (US 4,798,200).

Warthen is directed to a self-adhering orthopedic splint (Title).

As to claim 1, Warthen teaches a splint comprising an elongated, warp knit fabric where the fabric is provided with a tacky, pressure sensitive adhesive (Abstract). The Examiner equates the warp knit fabric to Applicant’s “knit” and the pressure sensitive adhesive to Applicant’s “pressure-sensitive adhesive coating”.

As to claim 2, Warthen teaches that the elongated knit fabric is a warp knit (Abstract).

As to claim 7, Warthen teaches that the pressure sensitive adhesive can comprise acrylic (column 4, lines 10 – 20). It should be noted that Applicant claims that the adhesive is “preferably UV crosslinkable”. The limitation suggests that it is preferred, but not necessary, for the adhesive to be crosslinkable. The Examiner acknowledges that Warthen does not mention that the pressure sensitive adhesive is crosslinkable. However, since limitation is preferred, but not necessary, it is the position of the Examiner that Warthen meets Applicant’s limitations. Furthermore, Applicant uses the claim language “crosslinkable” which implies that it is “capable of being crosslinked”. It should be noted that the Examiner considers the amendment to be a “capable of” type limitation. It has been held that an element is “capable of” performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

As to claim 12, Warthen teaches the use of polyester for the warp knit (columns 3 – 4).

As to claims 13 - 14, Warthen shows in Figures 8 – 9 that the knit is formed from a two-yarn system and that the knit is of Applicant’s required lapping.

As to claim 16, Warthen teaches that the monofilaments have a diameter between 2 mils to about 20 mils (column 3, lines 40 – 50). It should be noted that assuming 1.36 g/cc for polyester and when the monofilament has a diameter of 2 mils (50 microns), the monofilament would have a dtex of 26.7, which overlaps Applicant’s range.

As to claims 1, 3 and 8 – 11, Walthen discloses the claimed invention except for that the material thickness is 0.1 – 1.0 mm, the basis weight is between 40 – 200 gsm and the adhesive coating weighs 20 – 150 gsm as required by claim 1, the basis weight is 70 – 110 gsm as

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required by claim 3, the adhesive coating weighs no more than 65 gsm as required by claim 8, the carrier thickness is 0.2 to 0.7 mm as required by claim 9, the stitch density is at least 80 per dm as required by claim 10 and the wale density is at least 80 per dm as required by claim 11. It would have been obvious to one having ordinary skill in the art at the time the invention was made to create a tape having a material thickness is 0.1 – 1.0 mm, the basis weight is between 40 – 200 gsm and the adhesive coating weighs 20 – 150 gsm as required by claim 1, the basis weight is 70 – 110 gsm as required by claim 3, the adhesive coating weighs no more than 65 gsm as required by claim 8, the carrier thickness is 0.2 to 0.7 mm as required by claim 9, the stitch density is at least 80 per dm as required by claim 10 and the wale density is at least 80 per dm as required by claim 11, since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454 USPQ 233 (CCPA 1955). In the present invention, one would have been motivated to optimize the material thickness, basis weight and stitch density in order to create a self-adhering splint with optimal flexibility and strength.

As to claims 5 – 6 and 17, although Walthen does not explicitly teach the claimed breaking strength of at least 15 N/cm as required by claim 5, breaking extension not more than 60% as required by claim 6 and bond strength on steel of more than 3 N/cm as required by claim 17, it is reasonable to presume said properties are inherent. Support for said presumption is found in the use of like materials (i.e. a warp knitted fabric having a pressure sensitive adhesive coating) which would result in the claimed properties. The burden is upon the Applicant to prove

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otherwise. In addition, the presently claimed properties would obviously have been present once the Walthen product is provided.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Warthen et al. (US 4,798,200) in view of Murphy et al. (US 5,762,623).

Warthen teaches the claimed invention above but fails to teach that the adhesive tape is hand tearable in the cross direction.

Murphy is directed to an elastic bandage (Title) comprising a warp-knitted weft insertion fabric (Abstract). Murphy teaches that the tape is hand tearable (column 3, lines 20 - 35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the tape of Warthen hand tearable as suggested by Murphy motivated by the desire to easily create a tape with the desired length depending on end use.

8. Claims 1 – 3, 5 – 14 and 16 – 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al. (WO 01/80798).

Evans is directed to a bandage (Title).

As to claims 1 and 2, Evans teaches a bandage comprising a weft insertion fabric (Abstract) and a pressure sensitive adhesive (page 6, lines 15 – 30).

As to claim 7, Evans teaches that the pressure sensitive adhesive comprises rubber latex based adhesives and also can include certain acrylate ester copolymers (page 7, lines 1- 6). It should be noted that Applicant claims that the adhesive is “preferably UV crosslinkable”. The limitation suggests that it is preferred, but not necessary, for the adhesive to be crosslinkable.

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The Examiner acknowledges that Evans does not mention that the pressure sensitive adhesive is crosslinkable. However, since limitation is preferred, but not necessary, it is the position of the Examiner that Evans meets Applicant's limitations. Furthermore, Applicant uses the claim language "crosslinkable" which implies that it is "capable of being crosslinked". It should be noted that the Examiner considers the amendment to be a "capable of" type limitation. It has been held that an element is "capable of" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense.

In re Hutchison, 69 USPQ 138.

As to claim 12, Evans teaches that the fabric can comprise polyester or polyamide among other types of fibers (pages 4 – 5).

As to claims 13 - 14, Evans shows in Figure 2 the use of a two-yarn system and the lapping as specified by Applicant.

As to claims 1, 2, 8 – 11 and 16, Evans discloses the claimed invention except for that the material thickness is 0.1 – 1.0 mm, the basis weight is between 40 – 200 gsm and the adhesive coating weighs 20 – 150 gsm as required by claim 1, the basis weight is 70 – 110 gsm as required by claim 3, the adhesive coating weighs no more than 65 gsm as required by claim 8, the carrier thickness is 0.2 to 0.7 mm as required by claim 9, the stitch density is at least 80 per dm as required by claim 10 and the wale density is at least 80 per dm as required by claim 11 and the linear density of the fibers range from 20 – 70 dtex as required by claim 16. It would have been obvious to one having ordinary skill in the art at the time the invention was made to create a tape having a material thickness is 0.1 – 1.0 mm, the basis weight is between 40 – 200 gsm and

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the adhesive coating weighs 20 – 150 gsm as required by claim 1, the basis weight is 70 – 110 gsm as required by claim 3, the adhesive coating weighs no more than 65 gsm as required by claim 8, the carrier thickness is 0.2 to 0.7 mm as required by claim 9, the stitch density is at least 80 per dm as required by claim 10 and the wale density is at least 80 per dm as required by claim 11 and the linear density of the fibers range from 20 – 70 dtex as required by claim 16, since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454 USPQ 233 (CCPA 1955). In the present invention, one would have been motivated to optimize the fiber linear density, material thickness, basis weight and stitch density in order to create a self-adhering splint with optimal flexibility and strength.

As to claims 5 – 6 and 17, although Evans does not explicitly teach the claimed breaking strength of at least 15 N/cm as required by claim 5, breaking extension not more than 60% as required by claim 6 and bond strength on steel of more than 3 N/cm as required by claim 17, it is reasonable to presume said properties are inherent. Support for said presumption is found in the use of like materials (i.e. a warp knitted fabric having a pressure sensitive adhesive coating) which would result in the claimed properties. The burden is upon the Applicant to prove otherwise. In addition, the presently claimed properties would obviously have been present once the Evans product is provided.

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al. (WO 01/80798) in view of Murphy et al. (US 5,762,623).

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Evans teaches the claimed invention above but fails to teach that the adhesive tape is hand tearable in the cross direction.

Murphy is directed to an elastic bandage (Title) comprising a warp-knitted weft insertion fabric (Abstract). Murphy teaches that the tape is hand tearable (column 3, lines 20 - 35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the tape of Evans hand tearable as suggested by Murphy motivated by the desire to easily create a tape with the desired length depending on end use.

10. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al. (WO 01/80798) in view of Spillane et al. (US 4,881,383).

Evans teaches the use of pillar stitches combined with weft insertion stitches as shown in Figure 2. Evans fails to teach that the weft insertion stitches can be specifically in a velvet construction.

Spillane teaches a warp knitted fabric having a satin-effect by warp knitting a set of yarns in a stitch pattern extending underlaps of the yarn at the technical back of the fabric. The underlaps will provide a surface appearance of a satin weave. Spillane teaches that the another set of warp yarns may be knitted in a jersey, chain or other plain stitch pattern at the technical face of the fabric as a substrate or ground to provide structural integrity to the fabric (column 1). See Figure 1 for satin stitch (II) and chain stitch or pillar stitch (III) configurations.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the satin stitch with the chain stitch of Evans as suggested by Spillane


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to create a bandage having an aesthetically pleasing appearance provided by the satin stitches while having the structural integrity provided by the chain stitches.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Boyd whose telephone number is 571-272-1473. The examiner can normally be reached on Monday thru Friday (8:30am - 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jennifer Boyd
September 13, 2005


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